What is claimed is:

1.   A wireless LAN communication control method, comprising:

verifying whether data remains in a queue of a point coordinator (PC) after a contention-free period (CFP) is terminated; and

if a result of the verification indicates that data remains in the queue, transmitting the data remaining in the queue of the PC before entering a contention mode.

2.   The wireless LAN communication control method as claimed in claim 1, further comprising if the result of the verification indicates that no data remains in the queue, entering the contention mode.

3.   The wireless LAN communication control method as claimed in claim 1, wherein the data transmission operation obtains a preferential access to a medium and transmits data while one or more stations wait for use of the medium.

4.   The wireless LAN communication control method as claimed in claim 3, wherein the data transmission operation includes:

obtaining preferential access to the medium after a predetermined period of time;

transmitting the data via the medium; and

verifying a response signal to the data transmission.

5. The wireless LAN communication control method as claimed in claim 4, wherein the predetermined period of time is shorter than a DIFS time period for verifying whether the medium is idle.

6. The wireless LAN communication control method as claimed in claim 4, wherein the response signal verification operation includes:

waiting for an arrival of the response signal for a predetermined period of timeout; and

retrying the data transmission if the response signal fails to arrive with the predetermined period of timeout.

7. The wireless LAN communication control method as claimed in claim 6, wherein the operations of waiting for the arrival of the response signal and retrying the data transmission are repeated for a predetermined number of attempts.